O. OLSEN.

Portable Tool-Rests.

No. 210,957. Patented Dec. 17, 1878.

Fig. 1.

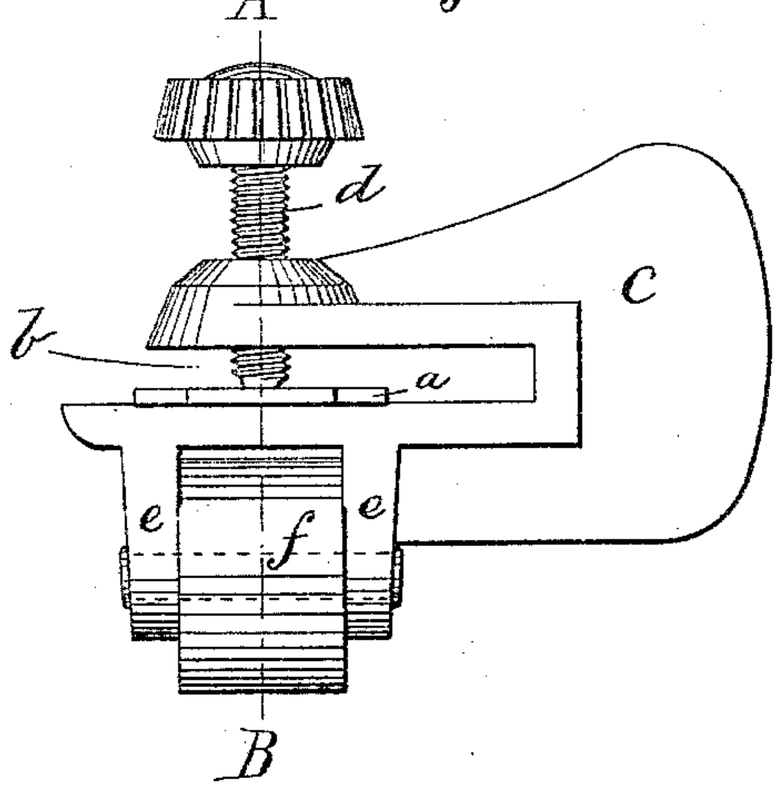
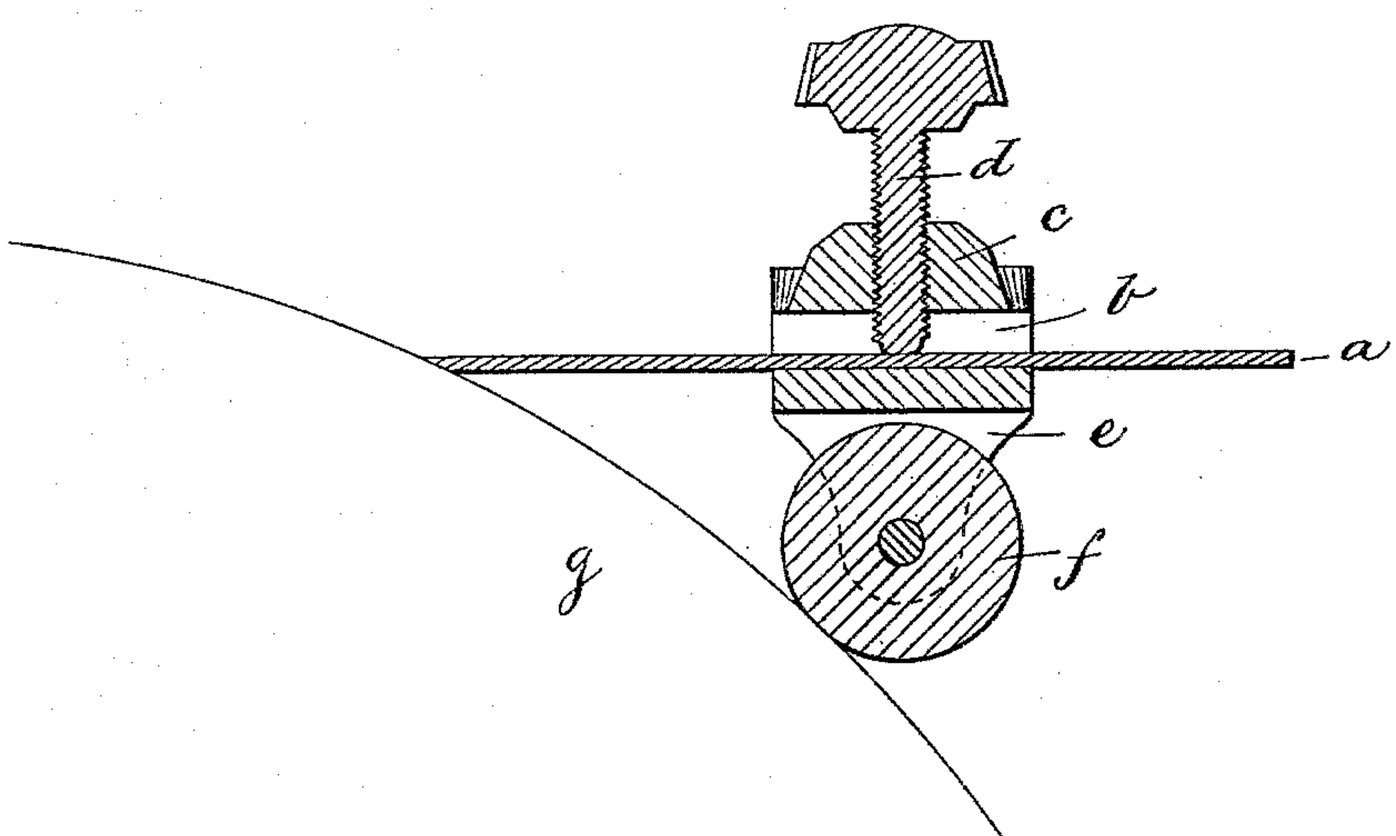


Fig. 2.



Witnesses:

Henry Chadbourn.

Douglas Munro.

Inventor:

Ole Olsen

by Albert G. Davis

his atty.

UNITED STATES PATENT OFFICE.

OLE OLSEN, OF CHRISTIANIA, NORWAY.

IMPROVEMENT IN PORTABLE TOOL-RESTS.

Specification forming part of Letters Patent No. **210,957**, dated December 17, 1878; application filed October 16, 1878.

To all whom it may concern:

Be it known that I, OLE OLSEN, of Christiania, in the county of Aggerhuus and Kingdom of Norway, have invented certain new and useful Improvements in Portable Tool-Rests; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in portable tool-rests, for the purpose of holding edge-tools in their proper positions, so as to obtain the desired bevel during the process of grinding and sharpening them; and my invention consists of the combination, with a clamp having a side opening for the reception of the tool that is to be ground, of a set-screw for securing the tool temporarily in position in the said clamp, and a roller located in bearings on the under side of the said clamp, which roller rotates freely when laid in contact with a revolving grindstone; and by this simple apparatus any unskilled person will be enabled to sharpen and properly bevel edge-tools of any kind equally as well as the most expert person. All that is required to do is to secure the edge-tool within the clamp in a position according to the desired bevel—that is, the tool is placed in the clamp so that its cutting-edge shall extend farther out from the side of the clamp in grinding sharp bevels, and farther back in grinding more obtuse ones.

When the tool is secured within the clamp, the edge of the tool, as well as the loosely-revolving roller beneath, is held in contact with the rotary grindstone, by which I obtain a true bevel, no matter how eccentric the grindstone may be.

This invention is equally useful in holding the tool when it is drawn on the oil-stone, or when ground on emery-wheels, &c.

I am aware of Letters Patent granted to O. Hanks, May 31, 1870, No. 103,739, in which a swivel caster-frame is jointed to a slotted frame for holding the tool, which frame is closed on four sides, and I wish to state that I do not claim such an arrangement and construction as my invention.

I make the tool-carrying frame open on one side, as described, so that the tool can be inserted sidewise, by which the edge of the tool is not liable to come in contact with such frame during the act of inserting it therein. The roller is located in bearings firmly secured or made in one piece with the tool-holder, by which great accuracy is obtained in grinding the tool. The roller is located in said bearings directly underneath the tool-holder, by which arrangement the roller and the edge of the tool to be ground are brought closer together, so as to enable me to grind tools more accurately, especially if the grindstone is of irregular shape.

On the accompanying drawing, Figure 1 represents a side elevation of my invention; and Fig. 2 represents a central longitudinal section on the line A B, shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the drawings.

a represents an ordinary planer-tool, that is inserted within the side opening, *b*, as shown, which opening is made in the metallic clamp *c*. *d* is a set-screw for holding the tool, as shown, which set-screw is inserted through the upper forward end of the clamp *c*. *e e* represent bearings beneath the clamp *c*, for the loosely-revolving guide-roller *f*. *g* represents a portion of the grindstone, as usual.

What I wish to secure by Letters Patent, and claim, is—

The herein-described tool-clamp for grinding tools, consisting of the frame *c*, with its side opening, *b*, for the insertion of the tool in a lateral direction, set-screw *d*, and stationary bearings *e e*, for the loosely-rotating roller *f*, all arranged and combined substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

OLE OLSEN.

Witnesses:

ALBAN ANDRÉN,

EDW. J. OLSEN.